IN THE CLAIMS:

The claims are as follows:

1.   (Original)   A method of processing messages, comprising:
receiving, at a sockets layer of a computer, data from a remote source via a network connection prior to allocating a buffer to contain the data; and subsequently allocating the buffer to contain the data.

2.   (Original)   The method of claim 1, wherein the messages are client-server messages.

3.   (Original)   The method of claim 1, wherein the data is received over a sockets streaming protocol.

4.   (Original)   The method of claim 1, wherein allocating the buffer comprises sizing the buffer according to a size of the data.

5.   (Original)   The method of claim 1, wherein the allocating is performed in response to a buffer request from the sockets layer.

6.   (Original)   The method of claim 1, wherein the network connection is a Transfer Control Protocol/Internet Protocol (TCP/IP) connection.

7.   (Original)   The method of claim 1, wherein allocating the buffer comprises:
processing a buffer request from a sockets layer after receiving the data; and providing the buffer to the sockets layer.

8.   (Original)   The method of claim 7, wherein the buffer request specifies a size of the buffer equal to a size of the data.

9.   (Original)   A computer readable medium containing a program which, when executed by a computer, performs operations for processing messages, the operations comprising:

processing an input operation issued from a sockets server application to a sockets layer of the computer, wherein the input operation is configured with a buffer mode parameter indicating to the sockets layer a buffer acquisition method for acquiring a buffer for containing data received from a remote source via a network connection.

10.   (Original)   The computer readable medium of claim 9, wherein the messages are client-server messages.

11.   (Original)   The computer readable medium of claim 9, wherein the data is received over a sockets streaming protocol.

12.   (Original)   The computer readable medium of claim 9, wherein the input operation is further configured with a record definition specifying to the sockets layer a format of the data.

13.   (Original)   The computer readable medium of claim 9, further comprising:
receiving the data from the remote source via the network connection; and subsequently
allocating the buffer.

14.   (Original)   The computer readable medium of claim 10, wherein the allocation is performed by one of the sockets server application and the sockets layer.

15.   (Original)   The computer readable medium of claim 10, wherein the buffer is allocated from one of:
storage owned by the sockets server application; and
system-supplied storage not owned by the sockets server application.

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16.   (Original)   The computer readable medium of claim 10, wherein allocating the buffer comprises sizing the buffer according to a size of the data.

17.   (Original)   The computer readable medium of claim 10, wherein allocating the buffer comprises calling back to the sockets server application with an instruction to allocate the buffer.

18.   (Original)   The computer readable medium of claim 10, wherein the allocating is performed in response to a buffer request made by the sockets layer.

19.   (Original)   The computer readable medium of claim 9, further comprising:
        receiving the data from the remote source via the network connection; and
        if the buffer is large enough to contain the data, copying the data into a previously allocated buffer provided to the sockets layer with the input operation; and
        if the previously allocated buffer is not large enough to contain the data, requesting a larger buffer sufficient to contain the data in accordance with the buffer acquisition method.

20.   (Original)   A system in a distributed environment, comprising:
        a network interface configured to support a network connection with at least one other computer in the distributed environment;
        a memory comprising a sockets server application, a socket in communication with the sockets server application and a protocol stack in communication with the socket, wherein the protocol stack is configured to transport messages between the network interface and the socket;
        a processor configured to perform operations for processing messages, the operations comprising:
            processing an input operation issued from the sockets server application to the socket, wherein the input operation is configured with a buffer mode parameter indicating to the socket a buffer acquisition method for acquiring a buffer for containing data received from the at least one other computer.

21.   (Original)   The system of claim 20, wherein the messages are client-server messages.

22.   (Original)   The system of claim 20, wherein the protocol stack is configured for a sockets streaming protocol.

23.   (Original)   The system of claim 20, wherein the memory comprises record definition specifying to the socket a format of the data.

24.   (Original)   The system of claim 20, wherein the operations further comprise:
       receiving the data; and subsequently
       allocating the buffer.

25.   (Original)   The system of claim 24, wherein the allocation is performed by one of the sockets server application and the socket.

26.   (Original)   The system of claim 24, further comprising application-supplied storage owned by the sockets server application and system-supplied storage not owned by the sockets server application and wherein allocating the buffer comprises one of:
       allocating the buffer from application-supplied storage; and
       allocating the buffer from system-supplied storage.

27.   (Original)   The system of claim 24, wherein allocating the buffer comprises sizing the buffer according to a size of the data.

28.   (Original)   The system of claim 24, wherein allocating the buffer comprises calling back to the sockets server application with an instruction to allocate the buffer.

29.   (Original)   The system of claim 24, wherein the allocating is performed in response to a buffer request made by the socket.